

## CL 80CU Bronze alloy

Bronze alloy in powder form

The bronze alloy CL 80CU is a material whose melting properties make it outstandingly suited to generative processing.

29  
**Cu**  
63,54

### CHEMICAL COMPOSITION

| Component | Indicative value (%) |
|-----------|----------------------|
| Cu        | 90                   |
| Sn        | 10                   |

## AREAS OF APPLICATION

Fabrication of original or master models in the fields of jewellery and artistically crafted sculptures. The material is very easy to polish and has a higher hardness than silver alloys.

## TECHNICAL DATA

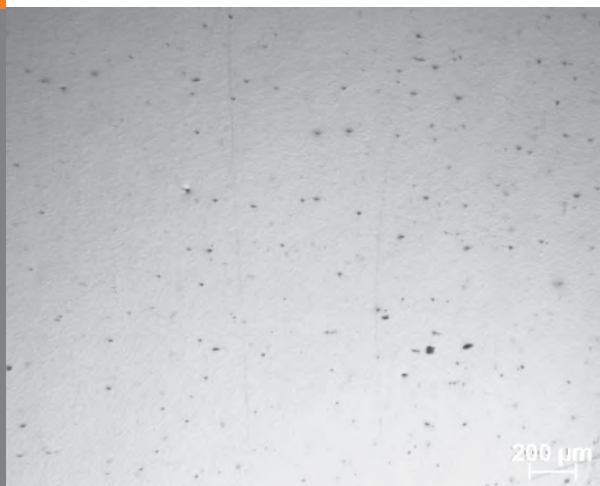
|                              |                                    |
|------------------------------|------------------------------------|
| Yield Point $R_e^1$          | approx. 400 N/mm <sup>2</sup>      |
| Tensile Strength $R_m^1$     | approx. 500 N/mm <sup>2</sup>      |
| Elongation A <sup>1</sup>    | approx. 5 %                        |
| Young's modulus <sup>1</sup> | approx. 120 · 10 N/mm <sup>2</sup> |
| Hardness HV 0.2              | 171 ± 7                            |

<sup>1</sup> Tensile test in accordance with DIN EN 10002 at room temperature.

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## MICROSCOPIC IMAGES

Microsection of a test piece  
(x 100 magnification)



Microscopic image of a polished ring  
(x 20 magnification)



## REWORKING

Before polishing, it is recommended if necessary that the surface be compacted by means of shot peening.

## MICROSTRUCTURE

Components made from the bronze alloy CL 80CU display, after being built up with the metal laser melting method LaserCUSING®, a homogeneous, dense structure.

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